

c.) Remarks

Claims 1-17 are pending in this application. Claims 1-3, 6, 11-12 and 17 have been amended in various particulars as indicated hereinabove.

Turning first to the Office Action Summary Sheet, claims 1-17 are pending in the application. Claims 1-17 were rejected.

Claims 1-17 were rejected under 35 U.S.C. 103(a) as being unpatentable over Engelhardt (U.S. Patent 6,355,919) and further in view of Brody *et al.* (U. S. Patent 3,645,627). This rejection is respectfully traversed for the following reasons.

For an obviousness rejection to be proper, the Patent Office must meet the burden of establishing a *prima facie* case of obviousness. The Patent Office must meet the burden of establishing that all elements of the invention are disclosed in the cited publications, which must have a suggestion, teaching or motivation for one of ordinary skill in the art to modify a reference or combined references.<sup>1</sup> The cited publications should explicitly provide a reasonable expectation of success, determined from the position of one of ordinary skill in the art at the time the invention was made.<sup>2</sup>

Engelhardt describes a confocal microscope with a calibration unit “in which case brightness fluctuations in the light source can be taken into account during detection.” (Col 2, lines 19-21 of Engelhardt). Therefore, the calibration process and means in Engelhardt aim to compensate for the brightness fluctuations of the light source, and not for the changes in the properties of a sensor due to its exposure to the UV light, which can reduce the sensitivity of the sensor. Because the technical problem which is attempted to be solved in Engelhardt is different, that patent does not disclose calibration of a sensor by obtaining a first response of a sensor, which is a pre-UV exposure

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<sup>1</sup> *In re Sang Su Lee*, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002).

<sup>2</sup> *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); *In re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970);

*Amgen v. Chugai Pharmaceuticals Co.*, 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996);

characteristic of the sensor, acquiring the sensor response after exposing to the UV radiation of some duration, and then calibrating the sensor itself by comparing its post-UV exposure response characteristic to the first, pre-UV exposure response. Engelhardt does not disclose calibrating a sensor based on its pre- and post UV exposure characteristics.

Turning now to Brody, disclosed there is a calibration system for an emission detector (Col 2, lines 53-60 of Brody). Disclosed there is a calibration method for calibrating the whole instrument, not a sensor. (Col. 3, line 54, Col. 4, line 40). The fact that the instrument in Brody includes a detector has to do with detecting light for the purpose of calibrating the whole instrument. Brody's calibration has to do with "the reference or calibration light [that] is subjected to attenuation from the same factors that act upon the signal, i.e. flame emissions at the wavelength under consideration." (Col. 3, lines 63-65). Brody goes on to explain that "since the reference light constitutes a known quantity of light, it serves to provide a datum level against which the flame induced emissions may be compared during analysis." (Col. 3, lines 69-72). Nowhere in Brody is it disclosed that a sensor is to be calibrated. Nor a method for calibrating a sensor as a result of pre- and post UV exposure is disclosed, as claimed in independent Claim 1.

Therefore, the combination of Engelhardt and Brody does not disclose all the elements of the invention as claimed in amended Claim 1. Consequently, the combination of these two patents does not support the obviousness rejection, which should be withdrawn. Amended independent Claim 1 is allowable. Claims 2-9 depend off now allowable Claim 1 and are allowable.

For the same reasons set forth above, amended independent Claim 11 is allowable. The combination of Engelhardt and Brody does not disclose a method for measuring features on a substrate using a UV microscope, the method comprising a step of calibrating a sensor by comparing the pre-UV and post-UV responses of the sensor using the corrected sensor's response to measure the features, as claimed in amended

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Claim 11. Accordingly, the obviousness rejection should be withdrawn and Claim 11 should be allowed.

Turning now to independent Claims 12 and 17, for the same arguments presented with regard to independent Claims 1 and 11, the combination of Engelhardt and Brody does not disclose the calibration means for directing different quantities of light onto the sensor and for obtaining a first pre-UV exposure response of the sensor and then the later post-UV exposure response of the sensor, and then evaluating the responses and correcting the response of the sensor itself, as claimed in amended independent Claim 12 and 17. Therefore, the combination of these two patents does not support the obviousness rejection, which should be withdrawn. Amended independent Claims 12 and 17 are allowable. Claims 13-16 depend off now allowable Claim 12 and are allowable.

The drawings were objected to because Figures 2 and 4 contain units of measurement in German. Substitute drawings are enclosed to overcome that objection.

Applicants believe that the present application is in condition for allowance. A Notice of Allowance is respectfully solicited. Should any questions arise, the Examiner is encouraged to contact the undersigned.

Respectfully submitted,  
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b.) Amendments to Drawings:

The following sheets of drawings include changes to Figs. 2 and 4. These sheets, which include Figs. 2 and 4, replace the original sheeting including Figs. 2 and 4.

The German captions have been translated into English in Figures 2 and 4. No new matter has been added.